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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,071	01/12/2001	Steven M. Shepard	64631-0031	7011

10291 7590 07/09/2002  
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BLOOMFIELD HILLS, MI 48304-0610

EXAMINER

LAU, TUNG S

ART UNIT PAPER NUMBER

2863

DATE MAILED: 07/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/623,071

Applicant(s)

SHEPARD, STEVEN M. *ck*

Examiner

Tung S Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claims 1-6, 10-14 and 17-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devitt et al. (U.S. Patent 5,703,362) in view of Walters et al. (U.S. Patent 5,300,746) and Del Grande et al. (U.S. Patent 5,444,241).

Devitt discloses a nondestructive measurement method: detecting a defect infrared images (fig. 4-6, col. 9, lines 27-45) and compare its characteristic properties (col. 6, lines 1-65), using a computer, processor, a storage device to store images and programs (fig. 1), a camera, digitize the image, a display (col. 3, lines 7-12, fig. 1).

Devitt does not superimpose the image, changing temperature of the sample. Walters shows the usage of the superimpose images (col. 8-9, lines 62-6). Del Grande show the changing temperature by directing the heat source to the sample (col.1, lines 36-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Devitt to have the superimpose idea taught by Walters in order to have an easy image comparison and testing on wide variety of structures (Del Grande col. 2, lines 5055).

**b.** Claims 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Devitt as applied to claim above, and further in view of Takashashi et al. (U.S. Patent 5,748,496).

The Devitt combination disclose a method including the subject matter discussed above except the process with temperature changes, Takashashi disclose such approach (col. 11, lines 10-49), easily recognize the defect in an object for inspection (col. 1-2, lines 65-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Devitt to have the process with temperature changes as taught by Takashashi in order to be able to recognize the defect in an object for inspection easily.

**c.** Claims 15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Devitt, Walters and Del Grande as applied to claim above, and further in view of Bittner (U.S. Patent 5,541,696).

The Devitt combination disclose a method including the subject matter discussed above except the camera having a front hood and a door to access the sample Bitter disclose a camera having an opening on the back, a front hood and a door (col. 1-2, lines 60-27, fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Devitt to have the front hood and a door to access the sample of a camera taught by Bitter in order to have an easy temperature influence of the sample.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection. However, applicant's arguments filed 6/11/2002 have been fully considered but they are not persuasive.

Applicant argue the prior art lack real 'time image processing' concept, Devitt talk about inspecting the workpiece (col.2, lines 25-43), for fast computerized inspection results (fig. 1-4), it would be obvious that Devitt invention would have suggested to use as a 'real time' processing system, furthermore, the concept of 'real time inspection' is well know in the art of the invention as show in Prejean-Lefevre invention (U.S. Patent 5,351,307) back in 1992, where his invention is related to 'real time' inspection of a part (col. 2, lines 3-21).

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309.

The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John S Hilten can be reached on 703-308-0719. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TL

A handwritten signature in black ink, appearing to read "John S. Hilten", written in a cursive style.

**JOHN S. HILTEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800**